

ALPAR

UNMANNED GROUND VEHICLE



Otokar

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ALPAR was developed as an unmanned platform that can perform tasks together with manned and unmanned elements in the battlefield to meet the robotic and unmanned ground vehicle requirements of the armed forces. ALPAR offers new capabilities and empowers the commanders in the field in planning and execution of combat power in the most effective way in tactical operations.

Single Platform for Different Missions

ALPAR's series hybrid-electric drive infrastructure empowers the following features:

- Co-operating as the lead or wing member with manned vehicles and/or infantry
- Conducting surveillance and reconnaissance missions with on board UAV's and UGV's
- Suppressing enemy/terrorist positions with fire
- Neutralizing facilities such as shelters/buildings and enemy vehicles with the main gun or guided missiles
- Serving as a direct fire and fire support element
- Execution of reconnaissance and surveillance missions
- Autonomous missions such as patrol, border surveillance, mini-UGV carrier (marsupial concept), drone carrier, etc.,
- Target detection and logistic support activities
- Loitering Munition Carrier, autonomous re-supply vehicle, C-UAS, EW missions.



Autonomous and Remote Controlled Driving Capabilities

- 360° situational awareness
- Up to 5 km of use with MIMO Radio (LOS and NLOS)
- AES128/256 encryption
- Advanced remote control and connectivity with satellite communication (BLOS)
- Route determination in GNSS denied environment
- Waypoint navigation and patrol duties
- Platooning and follow-me function for convoy missions
- Communication with other unmanned assets (UAV, USV, etc.)
- Return home function
- 2D and 3D LIDAR mapping
- Obstacle detection and re-routing
- Identification Friend or Foe (IFF)
- Advanced Driver Assistance Systems (ADAS)

Highlights

- Silent operation with the serial hybrid electric drive architecture
- Modular platform suitable for various mission equipment
- Ability to carry mini-UGV, that can increase mission capability
- Ability to operate autonomously and remote controlled
- Low thermal and acoustic signature
- High off-road mobility equalling to Armored Fighting Vehicles and Light Tanks
- Air transportable
- Quick-change battery pack
- Simple and easy-to-maintain platform LRU's, low logistic signature in the field

Alpar Vehicle Family



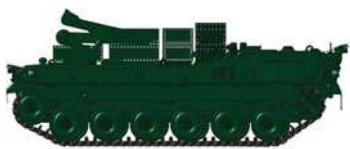
ARMORED FIGHTING VEHICLE



ANTI-TANK VEHICLE



RECONNAISSANCE AND SURVEILLANCE VEHICLE



LOGISTIC RE-SUPPLY VEHICLE



C-UAS VEHICLE



RELAY VEHICLE



ALPAR TECHNICAL SPECIFICATIONS







WEIGHT AND DIMENSIONS

Gross Vehicle Weight	15000 kg
Length	6250 mm
Width	2750 mm
Platform Height	1500 mm
Ground Clearance	450 mm

POWER PACK Series Hybrid with Diesel Range Extender

SUSPENSION Torsion Bar with Hydraulic Damper
Automatic Track Tensioning System

ELECTRIC SYSTEM Low Voltage: 24 VDC AGM Battery
High Voltage: 750 VDC Li-Ion Battery

> 70 km/h	30%	60%	700 mm	1800 mm	500 km
					
Maximum Speed	Side Slope	Gradeability	Vertical Obstacle	Trench Crossing	Range

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Otokar

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